

REMARKS

Claims 1-9 stand rejected under 35 U.S.C. § 103(a). In this regard, the Examiner contends in the May 7 Office Action that independent Claim 1 is obvious in view of United States Patent No. 6,505,246 to Land et al. Applicant respectfully disagrees with the Examiner's contention and respectfully submits that independent Claim 1 and Claims 2-9 depending directly or indirectly therefrom as well as new claims 27-34 are in condition for allowance.

Independent Claims 1 and 27 are directed to computer implemented collaboration systems that allow for single-user and multi-user collaboration wherein information from one or more data sources are extended in a general, shareable, updateable and synchronizable manner. The information and extended properties associated therewith are provided in a fully self-describing manner such that any client tool is capable of interpreting them. Further, the collaboration systems of Claims 1 and 27 permit different sets and values of extended properties to be provided based on a user's problem space, as well as allowing sharing, updating and synchronization to apply both to multiple views of the information by a single user and multiple views of the information by multiple users.

More specifically, the computer implemented collaboration system of independent Claim 1 includes at least one repository server, at least one client tool, at least one data channel server, and at least one extended property. The repository server is associated with at least one data source and is enabled for accessing data items within the data source using access methods native to the data source. The client tool is enabled for displaying the data items within the data source on a user terminal connectable with the computer implemented collaboration system. The data channel server provides an interface between the repository server and the client tool. The extended property is associated with each data item in the data source and is maintained within the data channel server. As such, a collaboration system in accordance with the limitations of Claim 1, maintains the extended properties associated with the data items separate from the repository server that accesses the data items from the data sources. Maintaining the extended property within the data channel server separate from the repository server provides the advantage of allowing for single user and multi-user collaboration without requiring that client tools be enabled for direct communication with one another or even have any knowledge of each other. (See Patent Application p. 9, lines 21-27).

As noted by the Examiner, Land does not disclose a collaboration system including an extended property that is associated with each data item in the data source and is maintained within the data channel server. In fact, Land does not even disclose a data channel server that provides an interface between the repository server and the client tool and within which the extended property associated with each data item in the data source is maintained. In the May 7 Office Action, the Examiner writes: "As shown in FIG. 3, client 22 facilitates the object request broker as a medium for communicating with data server 18 to obtain data, distribute objects, etc. from data server 18 (Col. 5, lines 16-24) as at least one data channel server providing an interface between said at least one repository server and said at least one client tool." May 7 Office Action, page 3, line 20 to page 4, line 2. However, nowhere in Land is it disclosed that an extended property is maintained within the Object Request Broker 300, which the Examiner has incorrectly equated with the data channel server element of Claim 1. Furthermore, Land does not suggest that an extended property could or should be maintained within the Object Request Broker 300 nor does Land provide any motivation for maintaining an extended property within the Object Request Broker 300.

In fact, Land specifically teaches away from maintaining extended properties within a data channel server that also provides an interface between a repository server and a client tool. In this regard, Land indicates that one of the other services 316 that Data Server 18 provides is a presentation service that maintains presentation information at a userid level while still providing the capability for users to share presentation (view 208) data such as contexts, workspaces and presentation properties (e.g., background color associated with a chart, images used as tree view nodes, and fonts associated with object labels). See Land, Col. 5, lines 25-29 and Col. 6 lines 9-18. Thus, Land specifically teaches that the presentation properties of Land are maintained by the presentation service that is part of the Data Server 18 and is not part of the Object Request Broker 300.

The computer implemented collaboration system of independent Claim 27 includes at least one repository server, at least one document server, at least one client tool and at least one data channel server. The repository server is associated with at least one data source and is enabled for accessing data items within the data source using access methods native to the data source. The document server provides at least one interface for creating a plurality of documents, with each document representing selected data items within the data source. The

client tool is enabled for displaying the data items represented by each document on a user terminal connectable with the computer implemented collaboration system. The data channel server provides an interface between the repository server and the client tool and is also enabled for maintaining an instance of at least one extended property associated with each data item represented in a document. Such a combination of limitations is not disclosed by Land or the other references of record. Among other differences with Land in particular, as discussed previously, Land does not disclose a collaboration system having a data channel server that maintains instances of an extended property associated with each data item represented in a document.

Based upon the foregoing, Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

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